

**IN THE CLAIMS:**

1. (previously amended) A method of immunizing and monitoring immunization, comprising:

- a) providing: i) a human, and ii) an immunizing preparation comprising myelin basic protein and Incomplete Freund's Adjuvant;
- b) immunizing said human with said immunizing preparation;
- c) obtaining a primary cell population from said human comprising T cells capable of secreting cytokines; and
- d) determining if said T cells are primarily Th2 cells secreting an anti-inflammatory cytokine or primarily Th1 cells secreting an inflammatory cytokine, wherein said Th2 cells secreting an anti-inflammatory cytokine indicates that said immunizing is protective against multiple sclerosis.

2-24. (previously cancelled).

25. (previously amended) A method of immunizing and monitoring immunization, comprising:

- a) providing: i) a human with symptoms of multiple sclerosis, and ii) an immunizing preparation comprising myelin basic protein and Incomplete Freund's Adjuvant;
- b) immunizing said human with said immunizing preparation;
- c) obtaining a primary cell population from said human comprising T cells capable of secreting cytokines; and
- d) determining if said T cells are primarily Th2 cells secreting an anti-inflammatory cytokine or primarily Th1 cells secreting an inflammatory cytokine, wherein said Th2 cells secreting an anti-inflammatory cytokine indicates that said immunizing is effective for treating symptoms of multiple sclerosis.

26. (previously amended) A method of immunizing and monitoring immunization, comprising:

- a) providing: i) a human, and ii) an immunizing preparation comprising myelin basic protein and Incomplete Freund's Adjuvant;
- b) immunizing said human with said immunizing preparation;
- c) obtaining a primary cell population from said human comprising T cells capable of secreting cytokines;
- d) adding said primary cell population to a microwell comprising a hydrophobic membrane having a first cytokine binding ligand, under conditions such that said T cell secretes a cytokine that binds to said first cytokine binding ligand;
- e) adding a second cytokine binding ligand to said microwell under conditions such that said cytokine binding ligand binds to said cytokine; and
- f) detecting said secreted cytokine, thereby monitoring said immunizing.

- 27. (previously added) The method of Claim 26, wherein said detected cytokine is IL-5.
- 28. (previously added) The method of Claim 26, wherein said detected cytokine is IL-4.
- 29. (previously added) The method of Claim 26, wherein said detected cytokine is IL-10.
- 30. (previously added) The method of Claim 26, wherein said detected cytokine is IFN $\gamma$ .
- 31. (previously added) The method of Claim 26, wherein said detected cytokine is IL-2.
- 32. (previously added) The method of Claim 26, wherein said hydrophobic membrane comprises polyvinylidene difluoride.
- 33. (previously added) The method of Claim 26, wherein said microwell comprises an enclosed bottom.
- 34. (previously added) The method of Claim 1, wherein said determining comprises detecting said secreted cytokine.

- 35. (previously added) The method of Claim 1, wherein said secreted cytokine is IL-5.
- 36. (previously added) The method of Claim 1, wherein said secreted cytokine is IL-4.
- 37. (previously added) The method of Claim 1, wherein said secreted cytokine is IL-10.
- 38. (previously added) The method of Claim 1, wherein said secreted cytokine is IFN $\gamma$ .
- 39. (previously added) The method of Claim 1, wherein said secreted cytokine is IL-2.
- 40. (previously added) The method of Claim 25, wherein said determining comprises detecting said secreted cytokine.
- 41. (previously added) The method of Claim 25, wherein said secreted cytokine is IL-5.
- 42. (previously added) The method of Claim 25, wherein said secreted cytokine is IL-4.
- 43. (previously added) The method of Claim 25, wherein said secreted cytokine is IL-10.
- 44. (previously added) The method of Claim 25, wherein said secreted cytokine is IFN $\gamma$ .
- 45. (previously added) The method of Claim 25, wherein said secreted cytokine is IL-2.